

CLAIMS:

[0185] What is claimed is:

1. An isolated polynucleotide comprising a first polynucleotide sequence or the full complement of the first polynucleotide sequence, wherein the first polynucleotide sequence encodes a polypeptide selected from the group consisting of SEQ ID NO:2 or 4.
2. The isolated polynucleotide of claim 1, wherein the isolated polynucleotide comprises the first polynucleotide sequence.
3. The isolated polynucleotide of claim 2, wherein the first polynucleotide sequence encodes the polypeptide consisting of SEQ ID NO:2.
4. The isolated polynucleotide of claim 3, wherein the isolated polynucleotide consists of the first polynucleotide sequence.
5. The isolated polynucleotide of claim 2, wherein the first polynucleotide sequence encodes the polypeptide consisting of SEQ ID NO:4.
6. The isolated polynucleotide of claim 5, wherein the isolated polynucleotide consists of the first polynucleotide sequence.
7. An expression vector comprising the isolated polynucleotide of claim 1.
8. A host cell comprising the expression vector of Claim 7.
9. An immunogenic composition comprising the isolated polynucleotide of claim 1 and a pharmaceutically acceptable carrier.
10. The immunogenic composition of claim 9, further comprising an adjuvant.

11. An isolated polynucleotide comprising a first polynucleotide or the full complement of the first polynucleotide sequence, wherein the first polynucleotide sequence is selected from the group consisting of SEQ ID NO:1 or 3.
12. The isolated polynucleotide of claim 11, wherein the isolated polynucleotide comprises the first polynucleotide sequence.
13. The isolated polynucleotide of claim 12, wherein the first polynucleotide sequence consists of SEQ ID NO:1.
14. The isolated polynucleotide of claim 13, wherein the isolated polynucleotide consists of the first polynucleotide sequence.
15. The isolated polynucleotide of claim 12, wherein the first polynucleotide sequence consists of SEQ ID NO:3.
16. The isolated polynucleotide of claim 15, wherein the isolated polynucleotide consists of the first polynucleotide sequence.
17. An expression vector comprising the isolated polynucleotide of claim 11.
18. A host cell comprising the expression vector of Claim 17.
19. An immunogenic composition comprising the isolated polynucleotide of claim 11 and a pharmaceutically acceptable carrier.
20. The immunogenic composition of claim 19, further comprising an adjuvant.